Community College Students’ Pathways to a Bachelor’s Degree

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Key Questions on Student Transfer

• What percentage of students who start at the community college transfer to a four-year college?
  – Definition of starting cohort
• When exactly do students transfer?
• Do transfers receive an associate degree before transferring?
  – How many credits to they complete before transferring?
Defining a Starting Cohort

• Students who start at a community college in North Carolina and eventually enroll at a four-year college within six years, at any point
  – We look at seven-year bachelor’s outcomes
• This definition is different from others that look at students who transfer smoothly
  – Smooth transfer: Only those with enrollment at CC in current or previous year
  – Others only include students who received their associate degree first
Transfer Basics in North Carolina

• About 22% of all FTIC students eventually transfer to a four-year college within six years
• Of those transfers, over half go to an in-state four-year college
• Undeclared students have the highest transfer percentage (33%), followed by Liberal Arts and Sciences majors (28%)
• In NC, there is a gen ed core that students can complete at the community college
  – In process of creating a 30-credit core
When Do Students Transfer?
When Do Students Transfer?
Timing of Transfer

• The last two visuals give evidence that students transfer across the spectrum of time
• Also evidence that students do not transfer smoothly into a four-year college
• Significant number of early transfers
  – However, wide variation in college readiness among this group
• Advantages of getting an associate degree, and then transferring?
Credits at the Community College

- On average, transfers attempted 32 college-level credits, and completed 30
- 37 credits attempted and 35 credits completed for UNC transfers
- About two-thirds of these college credits were within the gen ed core
- However, only about 9% of transfers completed the gen ed core in its entirety
  - 13% completion for UNC transfers
Award Completion

• Within seven years, about 35% of all transfers received a bachelor’s degree
  – More than three-quarters of these bachelor’s degrees were awarded at a UNC college

• Among these UNC transfers:
  – 24% received an associate degree
  – 51% of associate degree completers earned a bachelor’s degree
  – 48% of non-associate degree completers earned a bachelor’s degree
Credits Completed and Bachelor’s Completion among Transfers
Key Insights

• Students in North Carolina transfer at all points in time within a relatively long timeframe

• No definitive evidence that earning an associate degree is linked to bachelor’s completion

• Often, students do not smoothly transition from the community college to the four-year college
  – Enrollment gaps between CC and four-year
  – Students often do not get their associate degree first before transferring, even to the state system
  – Even smaller percentage complete the core
Relationships between Associate and Bachelor’s Degree Attainment
Should Students Earn an Associate Degree Before Transferring to a 4-Year?

- Previous research focuses on simple comparisons between associate degree recipients and non-recipients
  - No evidence of association between earning an associate degree and BA completion
- But… more sophisticated methods may produce more precise results
Analytical Issues

• Students transfer with varying amounts of credits
  – Those with more transfer credits may be at an advantage over those with fewer credits

• Students transfer at varying times
  – Students who transfer later are less likely to achieve four year outcomes than those who transfer early

• Students complete various programs, each awarding different degrees

• Selection problem/ omitted variables issue – students choose whether and when to transfer
  – What characteristics influence this decision?
Addressing Analytical Issues

• Restrict sample to students who earn between 50 and 90 college credits prior to transfer
• Control for time of transfer
• Consider various subgroups by degree type
• Use of propensity score matching (PSM)
  – Matches students according to observable characteristics to create a treatment group that is observationally similar to the control group
  – We include: sex, age, race, LEP, high school diploma, U.S. citizenship, inmate status, employment status and proxies for ability
Sample Characteristics: Students Earning Between 50 and 90 College Credits Prior to Transfer

- 18,580 FTIC students entering between Fall 2002 and Summer 2005
- Earned ~68 credits, on average
- Program enrollment by degree granted:
  - AA/AS/AFA: 43%
  - AAS: 22%
  - Non-associate degree: 35%
- Significant variation in time of transfer across all students
OLS Regression Results: Controlling for Time of Transfer

• Any associate degree
  – Probability of BA completion: 1.8 to 5.0 pp increase
  – Credits earned at 4-year: No impact

• AA/AS/AFA
  – Probability of BA completion: 3.4 to 10.4 pp increase
  – Credits earned at 4-year: 2 unit increase

• AAS
  – Probability of BA completion: No impact
  – Credits earned at 4-year: 9 unit decrease
Average Effect of Treatment on the Treated: PSM

• Any associate degree
  – Probability of BA completion: 1.2 to 2.5 pp increase
  – Credits earned at 4-year: 2 unit decrease

• AA/AS/AFA
  – Probability of BA completion: 3.1 to 9.3 pp increase
  – Credits earned at 4-year: No impact

• AAS
  – Probability of BA completion: No impact
  – Credits earned at 4-year: 7 unit decrease
For more information

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